

**Universiti Teknologi MARA**

**SPM Holders Career Path System  
using Clustering**

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**Thesis submitted in fulfilment of the requirements  
for Bachelor of Computer Science (Hons.) Faculty  
of Computer and Mathematical Sciences**

**January 2020**

## **SUPERVISOR APPROVAL**

### **SPM HOLDERS CAREER PATH SYSTEM USING CLUSTERING**

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JANUARY 3, 2020

## **STUDENT DECLARATION**

I certify that this thesis and the project to which it refers is the product of my own work and that any idea or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

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## **ABSTRACT**

As students are going through their academics and pursuing their interested courses, it is very important for them to assess their capabilities and identify their interests so that they will get to know in which career area they are interested with. This will help them in improving their performance and motivating their interests so that they will be directed towards their targeted career. Career is mainly one of the issues that is being debate currently in Malaysia. Career is becoming a hot issue because every year this problem keeps on repeating. There are several problems exist related to career. Firstly, students have difficulty to choose for their suitable career. Students are lack of exposure about career and expert to help them in determining their suitable career. Secondly, students are afraid of choosing the wrong career. Students nowadays enter the tertiary level not because of their own interest but follow their family passion. An example is when if elder brother study in medical course, other sibling needs to study in the same course too. Lastly, students have interest in more than one course. The model used to develop this system is waterfall model that has five phases which is planning, analysis, design, implementation and testing. This project is developed by using clustering technique to predict the suitable career of students based on their interest. Clustering will group one similarity characteristic in one group and dissimilarity in another group. Therefore, result shown that the objective has been achieved to predict the career based on the student interests. The contribution of the project is mainly for the students who have dilemma in choosing for their career. In conclusion, students who are confused and have no idea to pursue their study should consult with the counsellor or expert to know more about career.

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